



Little Missouri

River Crossing EIS

Alternatives Public Workshop
July 22, 2008
Bismarck, ND

Project # FHO-02-04(001) PCN # 16970

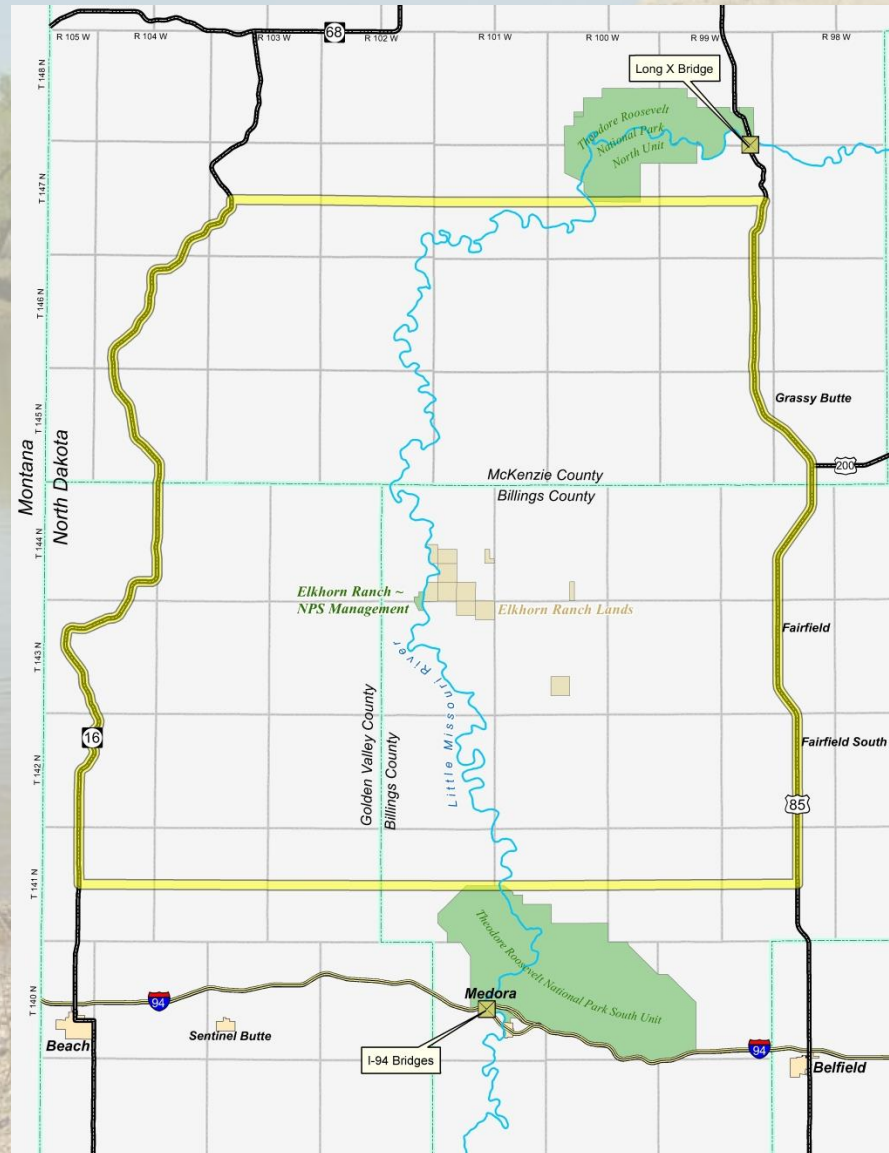
Tonight's Meeting

- Overview of the Project
- Purpose & Need
- Alternatives Development
- Roadway Alternatives
- Structure Options
- Next Step
- Project Schedule
- Questions & Comments

Overview of the Project

- EIS has been initiated for a proposed river crossing in conjunction with upgrading existing roadways to connect east river to west river, from ND Highway 16 to US Highway 85.

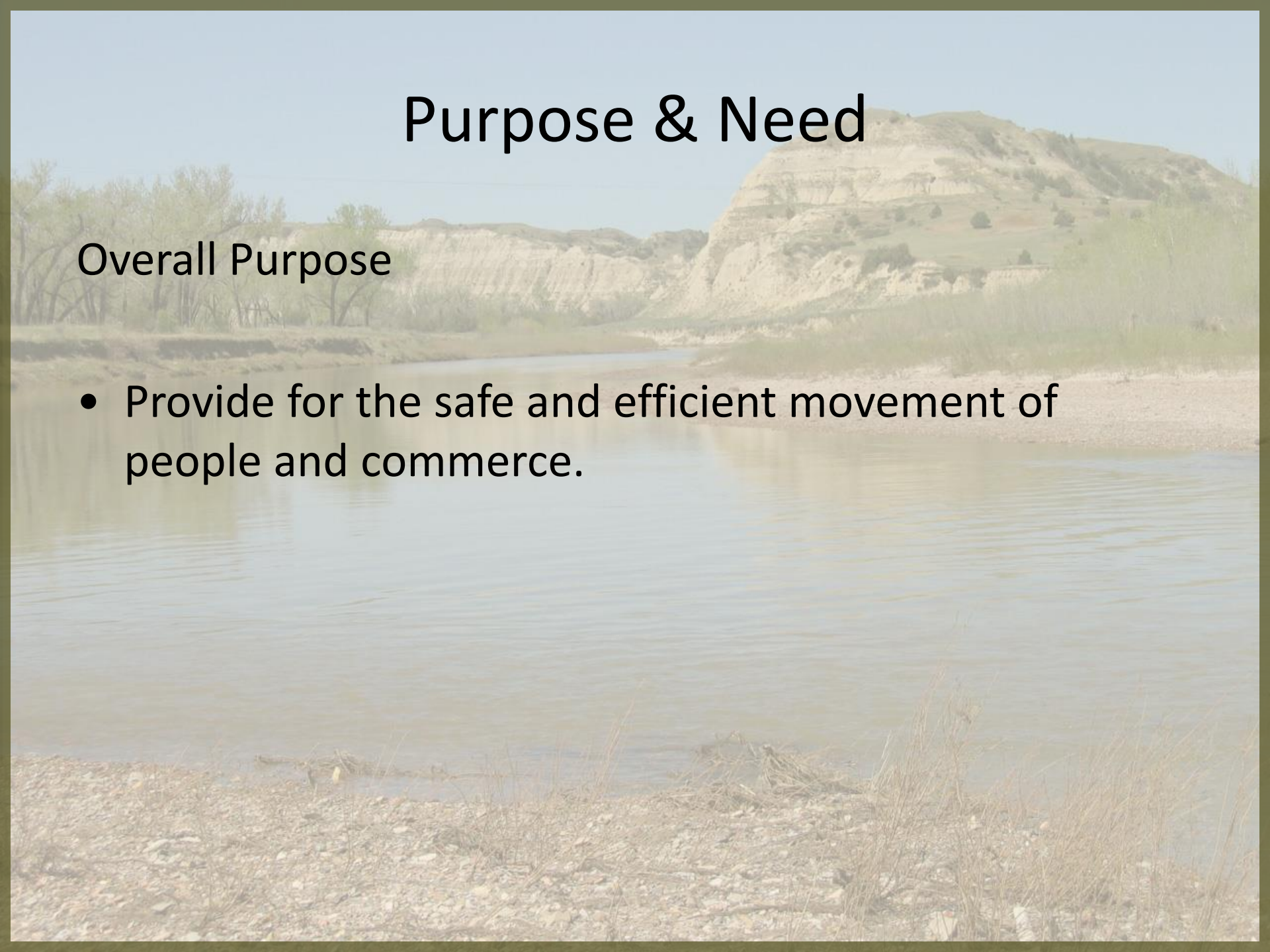
Overview of the Project



Purpose & Need

Overall Purpose

- Provide for the safe and efficient movement of people and commerce.



Purpose & Need

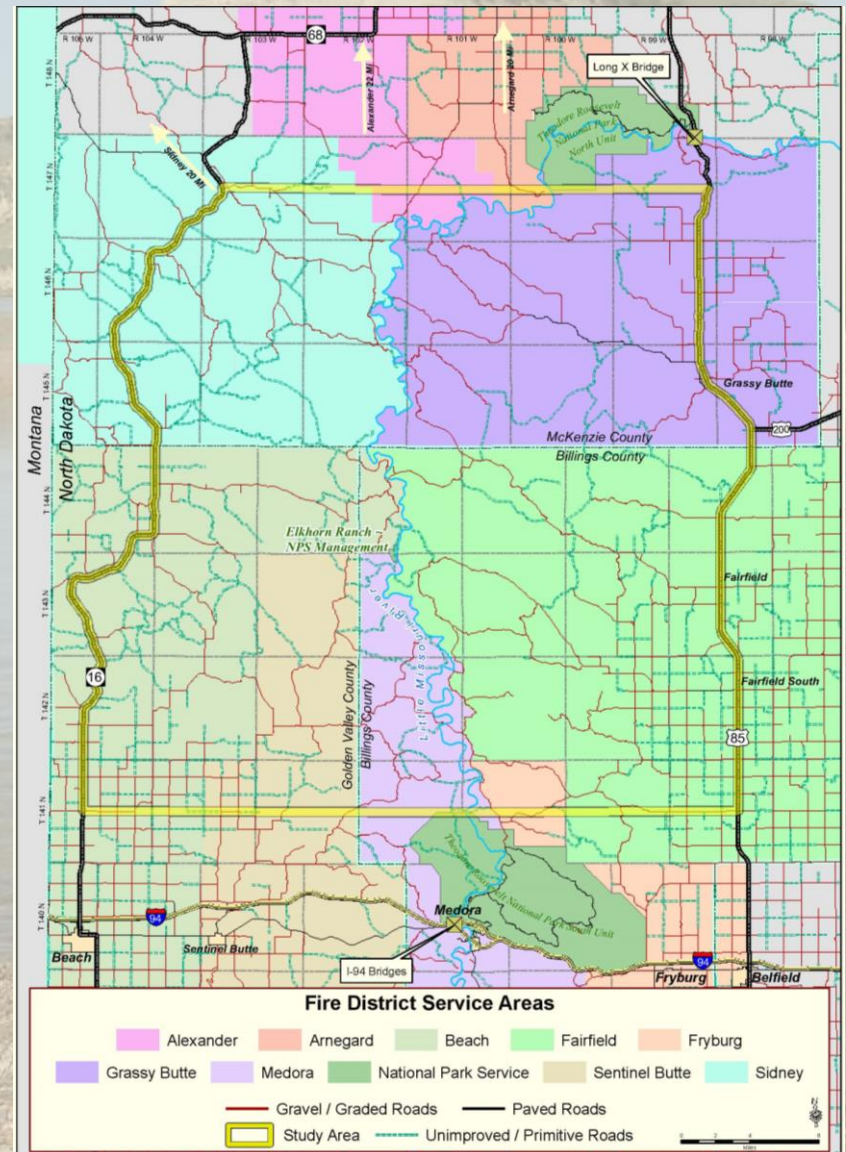
- Improve the transport of goods and services within the study area;
- Provide the public with a centrally accessible, safe, efficient, and reliable link between ND Highway 16 & US Highway 85 (system linkage);
- Connect the transportation network on the east side of the Little Missouri River to the transportation network on the west side (internal linkage); and
- Accommodate a variety of vehicles ranging from a two-wheel drive passenger vehicle to agricultural, commercial, and industrial vehicles and equipment.

Purpose & Need

- Billings County is leading a planning effort to improve internal and system linkage from ND Highway 16 & US Highway 85 to meet a variety of socioeconomic needs.
 - Fire management
 - Industry
 - Agriculture
 - Oil & Gas
 - Recreation/Tourism

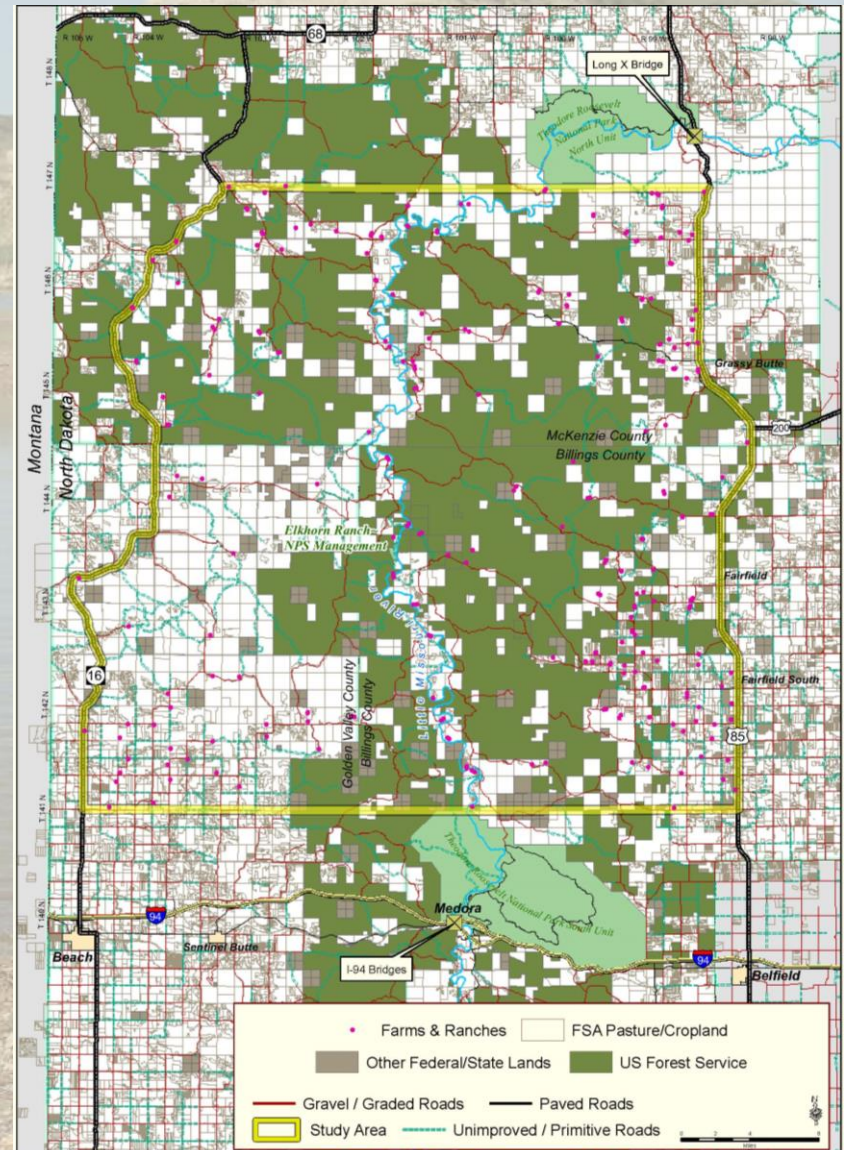
Fire Management

- Ten Fire Districts (not including US Forest Service)
 - Large service areas
- Between 2003 and 2007 142 wildfires recorded
 - Burned approximately 8,080 acres
- Mutual aid at times requires emergency responders cross the Little Missouri River



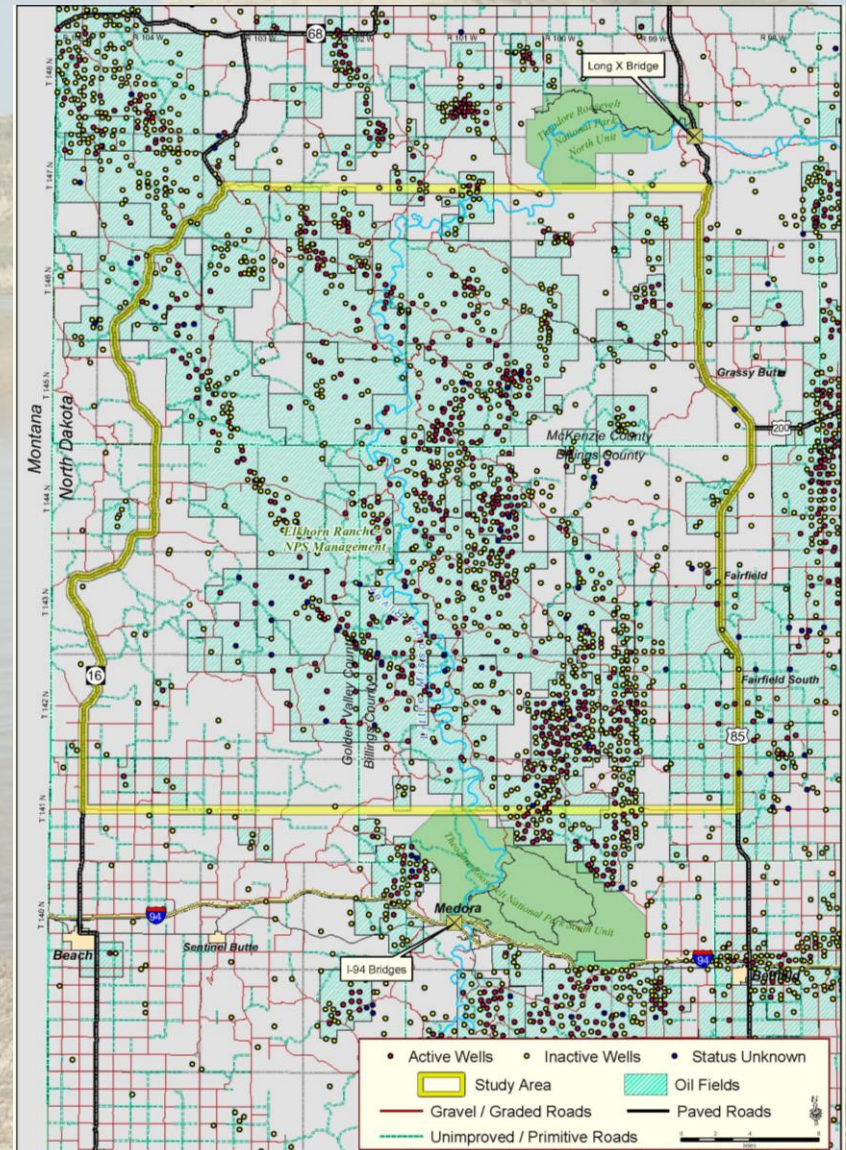
Agriculture

- 34% of Billings, Golden Valley, and McKenzie Counties is agricultural land (not including US Forest Service land)
- Number of farms decreasing while size of farms increasing
 - Larger areas to manage creates higher farm-to-market costs
 - Use of fords



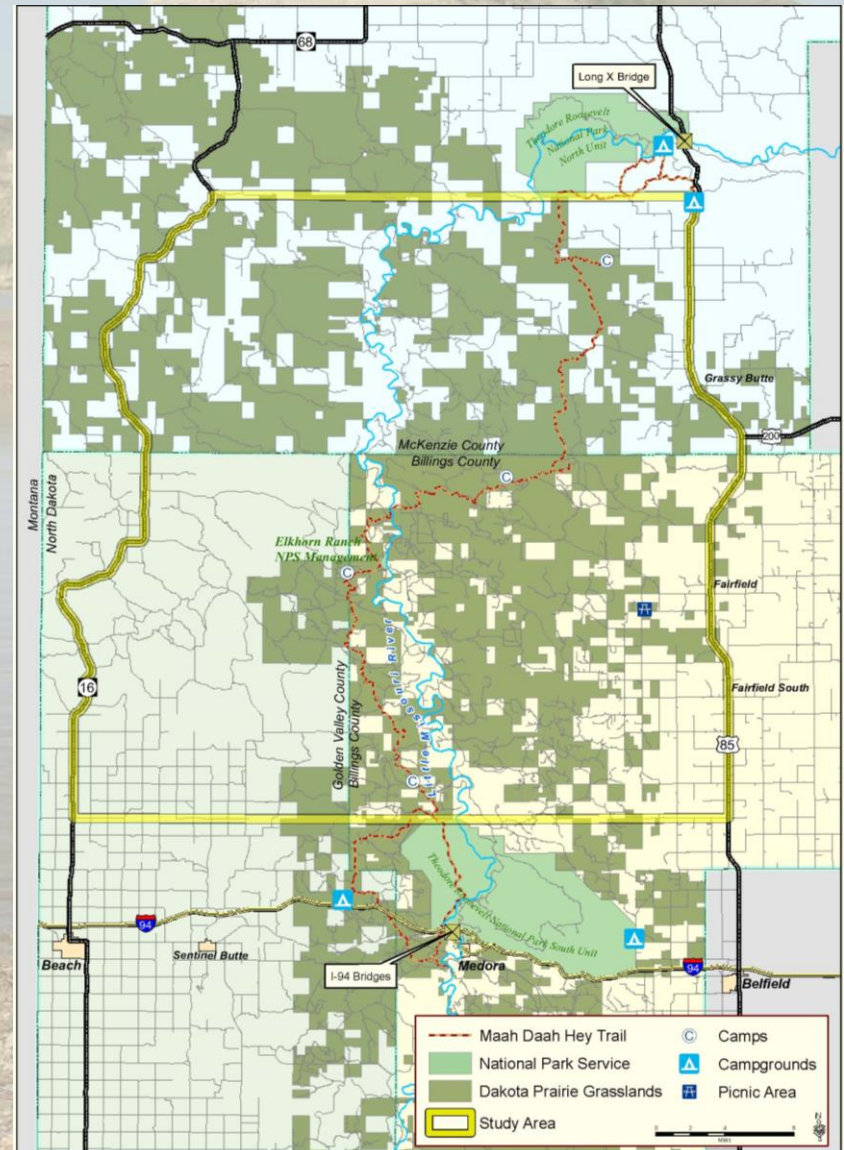
Oil & Gas

- Dakota Prairie Grasslands accounts for 19% of state's oil production (ND Petroleum Council)
 - Over 17% of active wells located here
 - Approximately two active oil rigs and 1,500 oil wells
- High cost of oil spurring increased development
- Lack of system linkage



Recreation/Tourism

- Many recreation/tourism opportunities in area (e.g., Maah Daah Hey Trail, TRNP, Medora)
- Influx of tourists creates demands on local resources
- Some of the general public want increased access



Alternatives Development

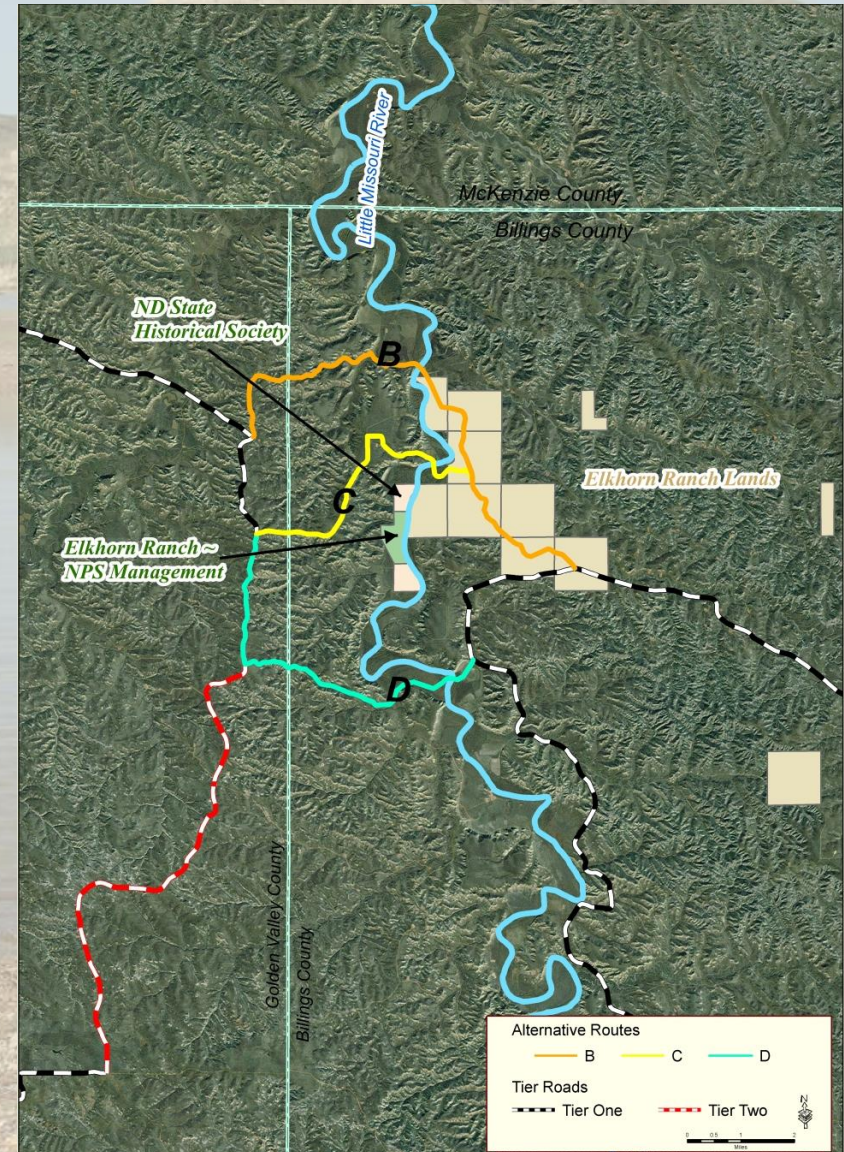
- Methodologies Meeting
 - Lead, cooperating, and participating agencies (July 30, 2007)
 - Created methodologies for developing and evaluating alternatives
- Seven-step Process
- Used Best Available Data

Methodologies for Alternatives Development

- Zones Concept
 - Meeting with lead & cooperating agencies
 - Four zones developed
- 1st Macro Analysis
 - Two out of four zones carried forward
- Eight Build Alternatives Developed in Two Zones
- 2nd Macro Analysis
 - Narrowed to three build alternatives
- Meeting with Lead & Cooperating Agencies
 - Concurrence to carry forward three build alternatives in EIS

Alternatives Carried Forward

- Alternative A (no-build)
- Three Build Alternatives
 - Alternative B
 - Alternative C
 - Alternative D



Alternative B

- Approximately 10 miles of roadway would be constructed and/or reconstructed
 - From Blacktail Road (Forest Highway 2) on west side of Little Missouri River to Blacktail Road on east side of Little Missouri River
- Structure Options: Bridge and low-water crossing
- Fly-through

Alternative C

- Approximately 8 miles of roadway would be constructed and/or reconstructed
 - From intersection of Bell Lake Road and Beaver Creek Road (Forest Highway 708A) on west side of Little Missouri River to Blacktail Road on east side of Little Missouri River
- Structure Option: Bridge
- Fly-through

Alternative D

- Approximately 7 miles of roadway would be constructed and/or reconstructed
 - From intersection of Bell Lake Road and Beaver Creek Road (Forest Highway 708A) on west side of Little Missouri River to East River Road on east side of Little Missouri River
- Structure Options: Bridge and low-water crossing
- Fly-through

Structure Options

- Bridge
 - Design for 25-year flood
 - Use NDDOT and FHWA standards
 - Blend into surroundings
- Low water crossing
 - Water overtops the road during heavy rain events and spring runoff
 - Design for 2-year flood or less

Structure Options



3-Vs Low-water Crossing Example

Structure Options



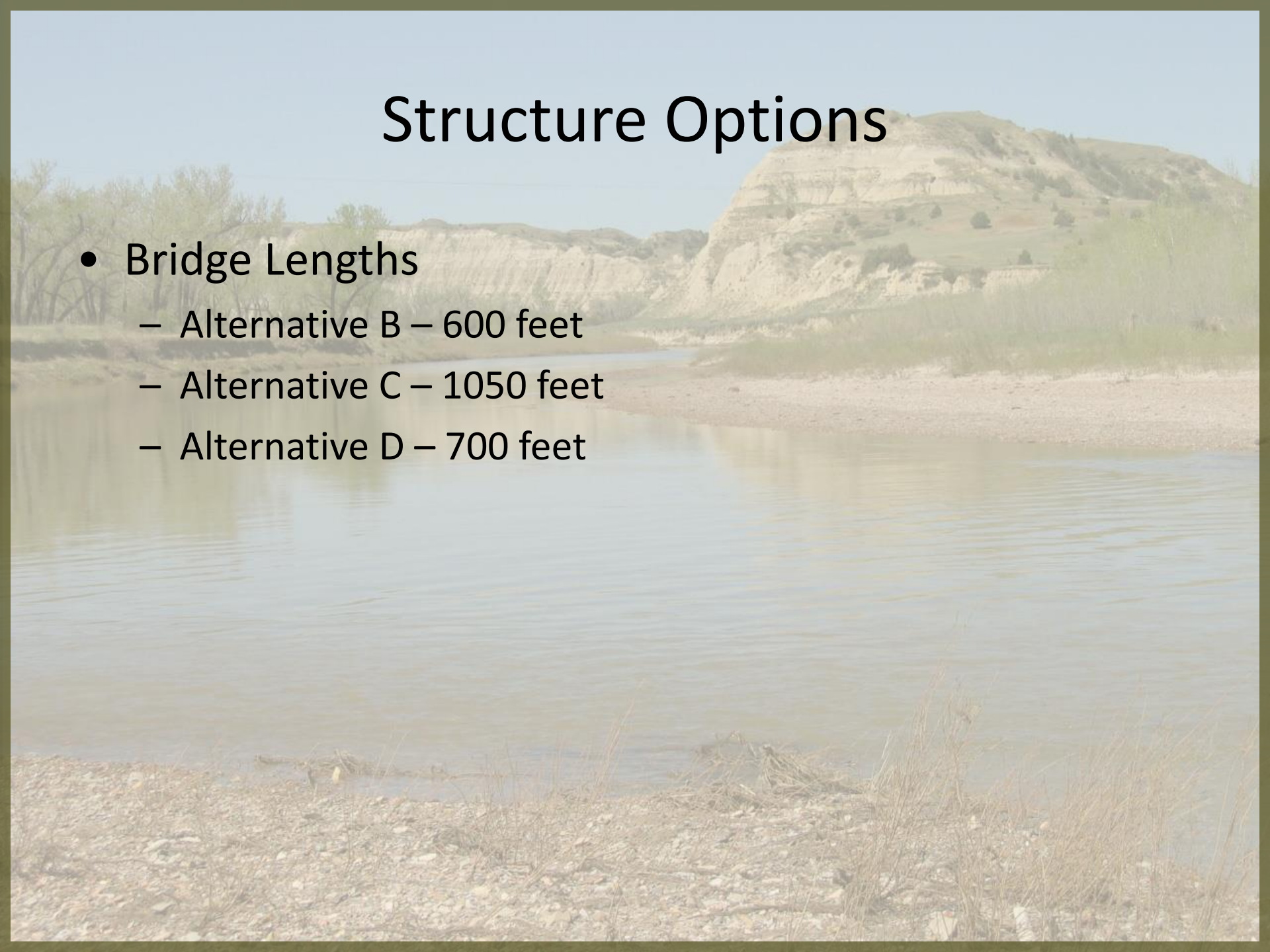
*KFYR Sky Spy Photo

Structure Options

- Bridge length estimate
 - Typically based on detailed survey data, and hydrologic/hydraulic analysis
 - Limited survey data obtained so far
 - No river channel survey data obtained
 - Transferred known river data from gaging station in Medora

Structure Options

- Bridge Lengths
 - Alternative B – 600 feet
 - Alternative C – 1050 feet
 - Alternative D – 700 feet



Alternative B Bridge Option

Little Missouri River Crossing
Environmental Impact Statement
Project No. FHO-02-04(001) PCN No. 16970
Alternative B



Alternative C Bridge Option

Little Missouri River Crossing
Environmental Impact Statement
Project No. FHO-02-04(001) . PCN No. 16970
Alternative C



Alternative D Bridge Option

Little Missouri River Crossing
Environmental Impact Statement
Project No. FHO-02-04(001) PCN No. 16970
Alternative D



Next Step

- Draft EIS
 - Purpose and Need
 - Alternatives
 - Affected Environment
 - Environmental Impacts and Mitigation
 - Agency and Public Involvement



Common Impact Categories

- Land Use
- Prime & Unique Farmland
- Social Considerations
- Relocations
- Economic Considerations
- Air Quality
- Water Quality
- Wetlands
- Water Body Modifications & Wildlife Impacts
- Floodplain
- Wild & Scenic Rivers
- Threatened & Endangered Species
- Cultural Resources
- Hazardous Materials
- Section 4(f)
- Section 6(f)
- Visual
- Temporary Construction Impacts
- Cumulative Impacts

Schedule

- Agency/Public Comment Period Ends — August 22, 2008
- Draft EIS — Spring 2009
- Final EIS — Winter 2009
- Record of Decision — Winter 2010

Thank you!

- Questions? Comments?

